

X(4050) $^\pm$ $I(J^P) = ?(?)$

OMITTED FROM SUMMARY TABLE

Observed by MIZUK 08 in the $\pi^+ \chi_{c1}(1P)$ invariant mass distribution in $\bar{B}^0 \rightarrow K^- \pi^+ \chi_{c1}(1P)$ decays. Not seen by LEES 12B in this same mode after accounting for $K\pi$ resonant mass and angular structure.

NODE=M191

X(4050) $^\pm$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
4051±14$^{+20}_{-41}$	¹ MIZUK	08	BELL $\bar{B}^0 \rightarrow K^- \pi^+ \chi_{c1}(1P)$

¹ From a Dalitz plot analysis with two Breit-Wigner amplitudes.

NODE=M191

X(4050) $^\pm$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
82$^{+21+47}_{-17-22}$	² MIZUK	08	BELL $\bar{B}^0 \rightarrow K^- \pi^+ \chi_{c1}(1P)$

² From a Dalitz plot analysis with two Breit-Wigner amplitudes.

NODE=M191M

NODE=M191M

NODE=M191M;LINKAGE=MI

NODE=M191W

NODE=M191W

NODE=M191W;LINKAGE=MI

NODE=M191215;NODE=M191

X(4050) $^\pm$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \pi^+ \chi_{c1}(1P)$	seen

DESIG=1

X(4050) $^\pm$ BRANCHING RATIOS

VALUE	DOCUMENT ID	TECN	COMMENT	Γ_1/Γ
seen	³ MIZUK	08	BELL $\bar{B}^0 \rightarrow K^- \pi^+ \chi_{c1}(1P)$	

• • • We do not use the following data for averages, fits, limits, etc. • • •

NODE=M191225

NODE=M191R01
NODE=M191R01not seen ⁴ LEES 12B BABR $B \rightarrow K\pi \chi_{c1}(1P)$

NODE=M191R01;LINKAGE=MI

³ With a product branching fraction measurement of $B(\bar{B}^0 \rightarrow K^- X(4050)^+) \times B(X(4050)^+ \rightarrow \pi^+ \chi_{c1}(1P)) = (3.0^{+1.5+3.7}_{-0.8-1.6}) \times 10^{-5}$.

NODE=M191R01;LINKAGE=LE

⁴ With a product branching fraction limit of $B(\bar{B}^0 \rightarrow X(4050)^+ K^-) \times B(X(4050)^+ \rightarrow \chi_{c1} \pi^+) < 1.8 \times 10^{-5}$ at 90% CL.

NODE=M191

REFID=54042
REFID=52535**X(4050) $^\pm$ REFERENCES**

LEES MIZUK	12B 08	PR D85 052003 PR D78 072004	J.P. Lees <i>et al.</i> R. Mizuk <i>et al.</i>	(BABAR Collab.) (BELLE Collab.)
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